

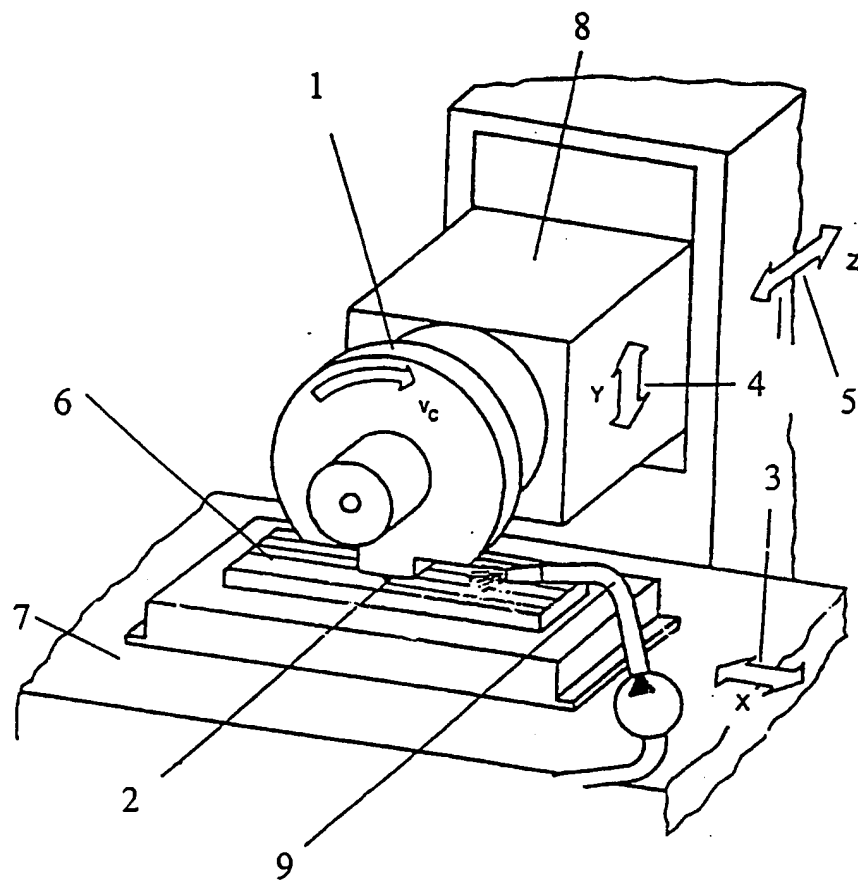
Abbildungen

Abb. 1: Prinzipieller Aufbau des Prüfstandes zum Einkornritzen

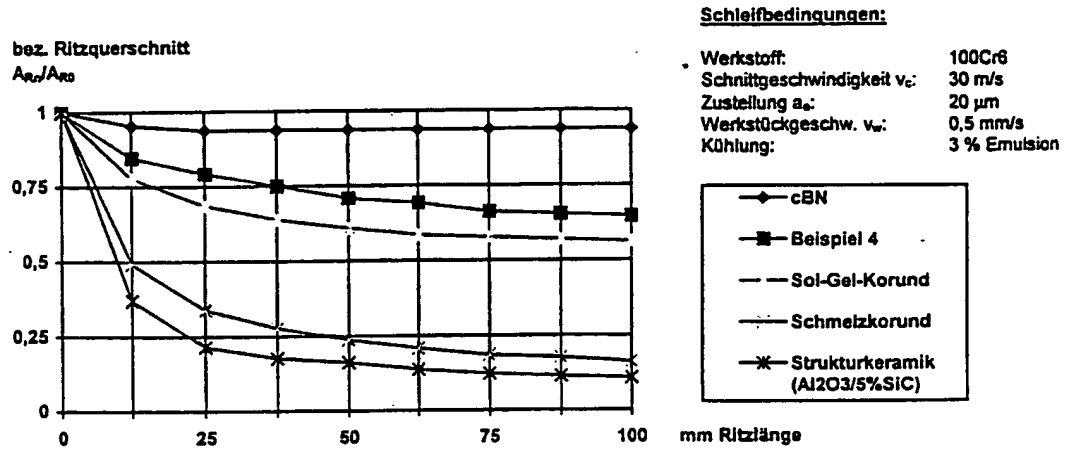


Abb. 2: Verschleißkurven von Al<sub>2</sub>O<sub>3</sub>/SiC-Nanokomposits im Vergleich zu einigen typischen Schleifkörnungen

**Illustrations**

[see original drawing]

III. 1: Elementary diagram of the test stand for one-grain scratching

2 / 3

rel. scratch cross section

 $A_{R0}/A_{R0}$ 

[see original]

Grinding Conditions:

Material:	100Cr6
Cutting speed $v_c$ :	30m/s
Feed motion $a_d$ :	20 $\mu$ m
Work piece speed $v_w$ :	0.5 mm/s
Coolant:	3% emulsion

----- cBN

----- Example 4

----- sol/gel corundum

----- melt corundum

----- structure ceramics  
(Al<sub>2</sub>O<sub>3</sub>/5%SiC)

mm scratch length

III. 2: Abrasion curves of Al<sub>2</sub>O<sub>3</sub>/SiC nanocomposites as compared with some typical abrasive grains

3 / 3

[photograph]

Figure 3

[photograph]

Figure 4